

Work Session at 10:15 A.M.
Public Service Center 1300 Franklin Street, Vancouver WA
Hearing Room, 6th floor

DATE 7/11/2018



PHASE 1 IMPROVEMENTS, SUPPORTING ULTIMATE SOLUTIONS

 **KITTELSON**
& ASSOCIATES

Interchange Vicinity



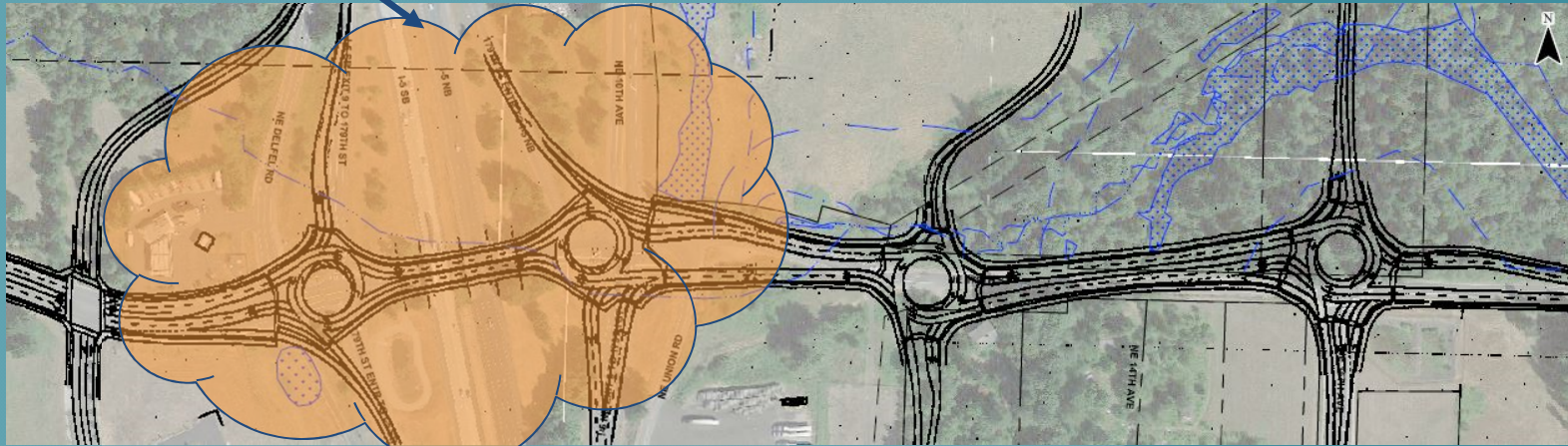
Development Summary and PM Peak Hour Trips

Project	Assumed Use	PM Peak Hour Trip Generation
Killian Pacific/Three Creeks Master Plan	60,000 Sq. Ft. Retail (DA Approved Phase 1)	425 total
	Three Creeks North Phase 1	402 total
	Phase 2 NE 179 th Street Commercial Center (DA Approved Phase 2)	711 total
Mill Creek PUD	PUD Buildout (606 single family homes and 99 townhomes)	657 total
Hinton Property	129 single family homes	129 total
Wollam Property	220 single family homes	220 total



Potential Ultimate Corridor Improvements

Future WSDOT I-5/179th
Interchange Improvements



NE Delfel Rd

SB Ramp



NB Ramp

NE 12th Av

NE 15th Av



Proposed Phase 1 Corridor Improvements



Cost of Phase 1 Mitigations: NE 179th St: I-5 NB Ramp to NE 15th Ave*

- \$20.6 million
 - Widens 179th Street east of I-5
 - Cul-de-sacs 10th Avenue & Union Road
 - Reconstructs I-5 northbound ramp signal
 - 10th Avenue connection to 12th Avenue
 - New ultimate 12th Avenue roundabout
 - Adds turn lanes on 179th at 15th Avenue
 - Excludes right-of-way costs
- Accommodates multiple developments
 - Three Creeks Phase 1 (60,000 sq. ft. retail previously vested)
 - Three Creeks North Master Plan Housing
 - Three Creeks Phase 2 (south retail previously vested)
 - Mill Creek PUD
 - Hinton Property
 - Wollam Property



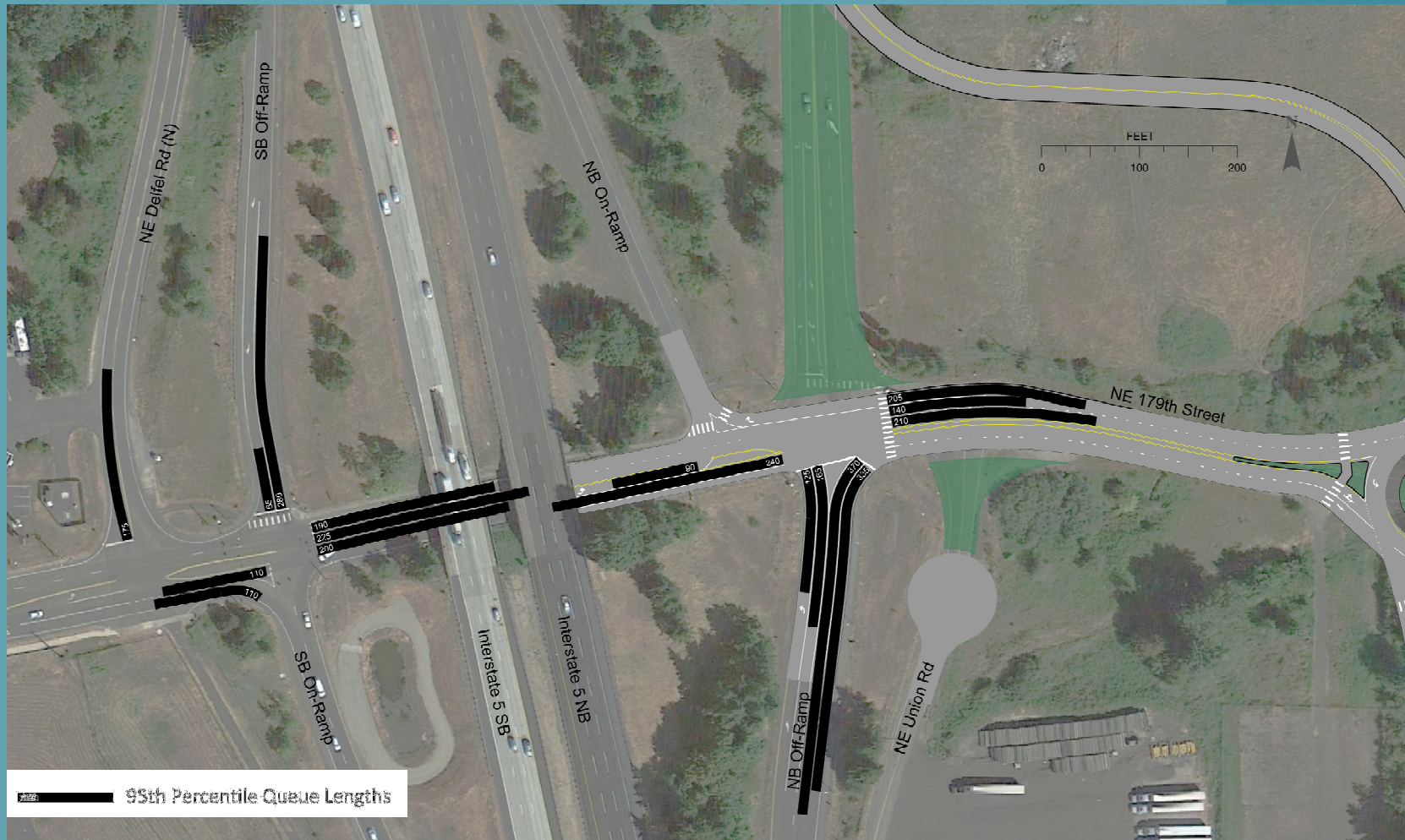
**Excludes other off-site concurrency requirements*



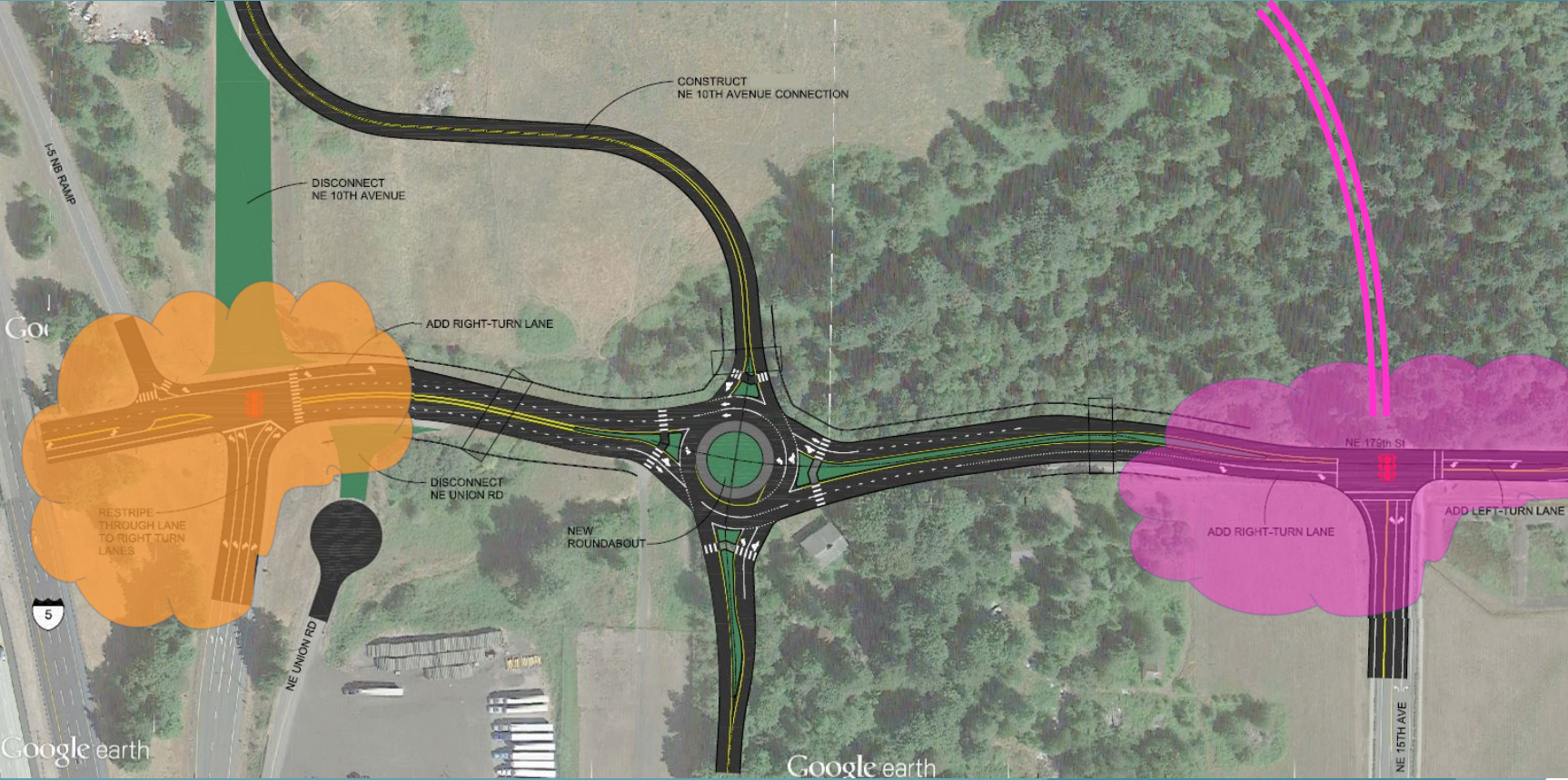
Phase 1 Improvements: PM Peak Hour % of Capacity Utilized



Future Queues with Phase 1 Improvements 2020 PM Peak Hour Analysis



Phase 1 Roundabout Compatibility with Long-term Plans



Area to be improved with WSDOT Interchange Project ←

Ultimate Improvements

→ Future 15th Avenue, Roundabout & 4-5 Lane 179th Street



Extra slides for Questions (if needed)



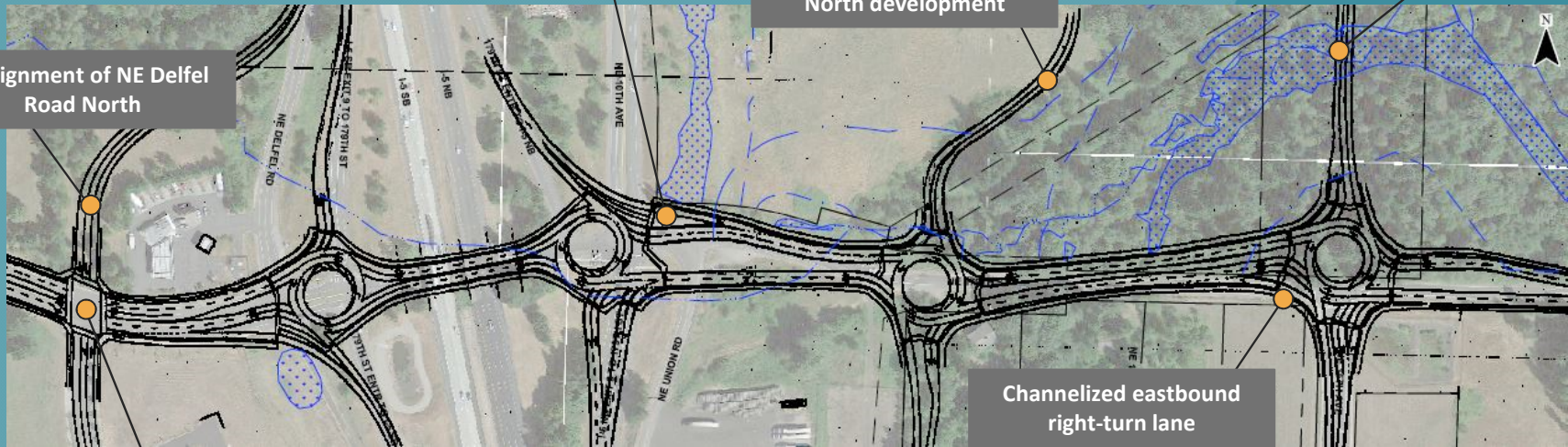
Conceptual Ultimate Improvement

Westbound right-turn
by-pass lane

Access to Three Creeks
North development

Ultimate realignment of
NE 10th Avenue via NE 15th
Avenue extension

Realignment of NE Delfel
Road North



Traffic Signal or Roundabout

Channelized eastbound
right-turn lane



Phase 1 Improvements: AM Peak Hour % of Capacity Utilized



Recommended Mitigations

Project	Phase	Recommended Mitigation on NE 179 th Street between NE Delfel Road (North) and NE 15 th Avenue
Killian Pacific/Three Creeks Master Plan	60,000 Sq. Ft. Retail (DA Approved Phase 1)	No mitigation required, proceed as previously approved.
	Three Creeks North Phase 1	1) NE 15 th Avenue/NE 179 th Street intersection: construct an eastbound right-turn lane with a right-turn signal overlap While not required for concurrency, consider voluntary improvements to terminate Union Road connection to NE 179 th Street
	Phase 2 NE 179 th Street Commercial Center (DA Approved Phase 2)	1) Construction of a new multi-lane roundabout on NE 179 th Street (with separate southbound right-turn lane) approximately midway between NE 15 th Avenue and the I-5 Northbound off-ramp (NE 12 th Avenue) 2) Elimination of the existing NE 10 th Avenue connection to NE 179 th Street aligned with the I-5 Northbound off-ramp (Refer to Figure 4) 3) Extension of NE 10 th Avenue to the new NE 12 th Avenue multilane roundabout (forming the north approach to the roundabout)
Mill Creek PUD	PUD Buildout (606 single family homes and 99 townhomes)	a. This change allows for re-routing the existing NE 10 th Avenue trips, creating capacity at the I-5 Northbound off-ramp/NE 179 th Street intersection b. In the alternative, the NE 10 th Avenue extension would be unnecessary if NE 15 th Avenue is first extended from NE 179 th Street to NE 10 th Avenue. Should NE 15 th Avenue be constructed first, the north approach of the new NE 12 th Avenue roundabout would be operated as a local street connection to serve properties between the NE 15 th Avenue extension and NE 179 th Street.
Hinton Property	129 single family homes	4) Reconfiguration of the I-5 Northbound off-ramp/NE 179 th Street intersection to provide:
Wollam Property	220 single family homes	a. two northbound left-turn lanes and two northbound right-turn lanes; and b. two westbound through lanes and a separate westbound right-turn lane to the I-5 northbound on-ramp
		5) Widening of NE 179 th Street to provide two westbound and two eastbound through travel lanes between the I-5 Northbound off-ramp/NE 179 th Street intersection and the new NE 12 th Avenue roundabout
		6) Termination of Union Road south of NE 179 th Street through provision of alternative access for properties along Union Road south of NE 179 th Street
7) Widening of NE 179 th Street between the new NE 12 th Avenue roundabout and NE 15 th Avenue to provide:	a. two eastbound through travel lanes through the NE 12 th Avenue roundabout, with the second eastbound lane becoming a right-turn drop lane at NE 15 th Avenue; and b. one westbound through lane at NE 15 th Avenue that opens to two westbound through travel lanes approaching the NE 12 th Avenue roundabout.	
8) Modification of the NE 15 th Avenue/NE 179 th Street intersection: construct a westbound left-turn lane		